



National Institute of
Standards and Technology

INTERNATIONAL BIOMETRIC PERFORMANCE CONFERENCE

Evaluation and Performance of Biometric Technologies

March 5-9, 2012
Call for Papers



National Physical Laboratory



Fraunhofer
IGD

NIST, NPL and Fraunhofer IGD invite talks for the IBPC conference on performance and testing of biometric systems. The forum will bring together evaluators, users, technology providers to discuss performance in applications that embed biometric functions or component. The conference aims to detail developments in *how* systems are being tested, certified, upgraded and improved rather than to snapshot specific testing results. The conference specifically invites talks on Automated Border Control, a rapidly growing application of front-end and back-end biometric technology today, and emerging biometric uses. The talks will target operationally relevant themes, and will give emphasis to design, procurement, and what operators require from test and evaluation activities. The conference aims to advance future use of biometrics by sifting salient points from the accumulated experience of the last decade, to identify novel evaluation methodologies and recent trends in testing, and to determine what is most operationally relevant in the context of the contemporary and emerging marketplaces.

Topic area I: Test methods:

Identification systems: metrics, limits, scalability
Product vs. component tests, certification, interoperability
Beyond the DET: Novel tests and performance metrics
Efficient testing, re-usable testing, frameworks
Statistical methods for efficiency, for prediction
Desirable, undesirable algorithm properties – 1:1, 1:N and forensics
Desirable, undesirable sample properties – Level III Conformance tests
Quality and reliability of sensors and capture devices
Untested and unspoken aspects of performance: what matters, what does not, what's in the noise?
Testing and standardization gaps
Usability / Accessibility testing for biometrics

Topic area II: Operational aspects

Certification criteria and certification programs
How to drive error rates lower: Measurement for control + mitigation
New testing campaigns
Total system performance and tradeoffs: Accuracy, speed, security, reliability, usability, interoperability, scalability, assurance, stability
How to specify performance (for procurement)
Technology vs. scenario vs. operational vs. other tests
From research, to design, to deployment, to fielded operation
Quality of samples and databases. Evaluation / roles of Quality
Remote testing; testing in the cloud; data in the cloud.
Data and its ground-truth: operational vs. laboratory vs. synthetic

Topic area III: Security and privacy aspects

Evaluation of multi-factor authentication
Template protection and biometric pseudo-identifiers
Privacy enhancing technology, de-identification
Remote authentication: Challenges, assurance, testing
Resilience under active attacks (vulnerability, spoofing)
Defeat of systems (detection of evasion)
Feasibility of common criteria testing of biometric components
Retrospectives, lessons learned, long term perspective, critical appraisal of other programs, events, specifications.

Program Committee:

Patrick Grother, Elham Tabassi, NIST, US
Tony Mansfield, NPL, UK
Christoph Busch, Fraunhofer IGD, DE

Intended speakers:

Research and development staff, system analysts,
Users, evaluators, planners, writers of technical specifications, standards developers and adopters.

Target audience:

Professionals concerned with biometric system evaluation, procurement, deployment, maintenance, design, configuration, integration, standardization, research and development.

Important dates:

Jan 11 2012	Submission of abstracts
Jan 15 2012	Notification of acceptance
Feb 17 2012	Submission of presentation and supporting papers
Mar 05 2012	Satellite Workshops I NFIQ 2.0 + Others, TBA
Mar 06 2012 Mar 08 2012	IBPC 2012 Conference
Mar 09 2012	Satellite Workshops II, TBA

Logistics:

When: March 5-9, 2012
Where: Green Auditorium (cap. 250)
NIST Gaithersburg, MD, USA
Internet: Wireless
Hotel: Two Gaithersburg Area Hotels, TBA
Fee: \$US 175 via Registration

Contact the organizers:

Email: [ibpc2012](mailto:ibpc2012@nist.gov) AT [nist](http://nist.gov) DOT gov



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